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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,569	05/25/2000	Kiyonori Sekiguchi	P19529	6332

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EXAMINER

LIN, KENNY S

ART UNIT	PAPER NUMBER
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2154

DATE MAILED: 12/03/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/577,569

Applicant(s)

SEKIGUCHI, KIYONORI

Examiner

Kenny Lin

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) Paper No(s). <u>9</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

1. Claims 12-24 are presented for examination. Claims 1-11 have been canceled by the applicant.
2. After further consideration regarding the finality of the last Office action, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akatsu et al (hereinafter Akatsu), US 6,496,862, in view of Lo et al (hereinafter Lo), US 6,324,178.
5. Akatsu was cited in the previous office action.
6. As per claims 12 and 22, Akatsu taught the invention substantially as claimed including a gateway apparatus capable of connecting to the Internet, the gateway apparatus being one of a plurality of components in a home network (col.6, lines 33-58, col.8, lines 66-67, col.9, line 1), the home network including a transmitting apparatus connected to the gateway apparatus (col.6,

Art Unit: 2154

lines 43-45) and an input device connected with the gateway apparatus (col.9, lines 2-17), the gateway apparatus comprising:

- a. A communicator that is configured to communicate with a receiving apparatus through the Internet (col.9, lines 30-31, 33);
- b. A controller that is configured to receive data (col.9, lines 2-6), to configure the data for Internet transmission (col.9, lines 2-6), the IP address assigned to the receiving apparatus being input by the input device (col.9, lines 2-17).

7. Akatsu did not specifically teach that the transmitting apparatus does not have an IP address; the controller to generate an Internet-frame based on the data received from the transmitting apparatus and an IP address which is assigned to a receiving apparatus and to send the Internet-frame to the receiving apparatus through the communicator. Lo taught a gateway for bridging data of different communication domains to include a controller to generate an Internet-frame based on the data received from the transmitting apparatus an IP address which is assigned to a receiving apparatus (col.1, lines 45-49, col.4, lines 52-57, col.5, lines 13-14, col.6, lines 1-19, 31-37, 43-46, col.8, lines 32-43); and to send the Internet-frame to the receiving apparatus through the communicator (col.6, lines 43-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Akatsu and Lo because Lo's teaching of reformatting the received data and an IP address provides Akatsu's gateway to reformat data to support all communication standards (col.1, lines 40-49, col.2, lines 56-57, col.4, lines 52-55). Akatsu and Lo did not specifically teach that the transmitting apparatus does not have an IP address. However, since Lo taught to support any communication

Art Unit: 2154

standard (col.4, lines 52-55), it would have been obvious to one of ordinary skill in the art to use non-IP apparatuses in a communication domain as transmitting apparatuses to send data to be bridged to another communication domain. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use non-IP apparatus as the transmitting apparatus in Akatsu and Lo's system since Lo taught to support and bridge any communication standard data (col.4, lines 52-55).

8. As per claims 16 and 23, Akatsu taught the invention substantially as claimed including a gateway apparatus capable of connecting to the Internet, the apparatus being one of a plurality of components in a home network (col.6, lines 33-58, col.8, lines 66-67, col.9, line 1), the apparatus comprising:

- a. An interface that is configured to connect with a receiving apparatus (col.7, lines 15-17);
- b. A communicator that is configured to communicate with a transmitting apparatus through the Internet (col.9, lines 30-31, 33);
- c. A controller that is configured to receive data from the transmitting apparatus (col.9, lines 2-17, 30-31, 33).

9. Akatsu did not specifically teach that the receiving apparatus does not have an IP address; a memory that is configured to store an IP address corresponding to the receiving apparatus not having the IP address; a controller that is configured to receive an Internet-frame including the IP address corresponding to the receiving apparatus not having the IP address, to search the

Art Unit: 2154

memory for the receiving apparatus not having the IP address to which the data is to be transferred, based on the corresponding IP address included in the Internet-frame, and to transfer the data to the receiving apparatus not having the IP address. Lo taught a gateway for bridging data of different communication domains to include a memory that is configured to store an IP address corresponding to the receiving apparatus (col.6, lines 18-21, col.8, lines 32-43); controller to receive an Internet-frame including the IP address corresponding to the receiving apparatus (col.1, lines 45-49, col.4, lines 52-57, col.5, lines 13-14, 19-23, col.6, lines 1-19, 31-37, 43-46, col.8, lines 32-43); to search the memory for the receiving apparatus to which the data is to be transferred, based on the corresponding IP address included in the Internet-frame (col.6, lines 18-21, col.8, lines 32-43); and to transfer the data to the receiving apparatus (col.6, lines 43-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Akatsu and Lo because Lo's teaching of seeking an unknown destination address in a memory helps Akatsu's gateway to find the corresponding destination apparatus and prevent data packet lost. Akatsu and Lo did not specifically teach that the receiving apparatus does not have an IP address. However, since Lo taught to support any communication standard (col.4, lines 52-55), it would have been obvious to one of ordinary skill in the art to use non-IP apparatuses in a communication domain as receiving apparatuses to receive data to that are bridged from another communication domain. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use non-IP apparatus as the receiving apparatus in Akatsu and Lo's system since Lo taught to support and bridge any communication standard data (col.4, lines 52-55).

10. As per claims 19 and 24, Akatsu taught the invention substantially as claimed including a gateway apparatus capable of connecting to the Internet, the apparatus being one of plurality of components in a home network (col.6, lines 33-58, col.8, lines 66-67, col.9, line 1), the apparatus comprising:

- a. An interface that is configured to connect with a receiving apparatus (col.7, lines 15-17) not having an IP address;
- b. A communicator that is configured to communicate with a transmitting apparatus through the Internet (col.9, lines 30-31, 33);
- c. An application program which converts received data into data which the receiving apparatus can interpret (col.9, lines 2-6).

11. Akatsu did not specifically teach that the receiving apparatus does not have an IP address; a memory that is configured to store an IP address corresponding to the receiving apparatus not having the IP address and an application program which converts received data into data which the receiving apparatus not having the IP address can interpret; and a controller that is configured to receive an Internet-frame including the IP address corresponding to the receiving apparatus not having the IP address and data from the transmitting apparatus, to search the memory for the receiving apparatus not having the IP address to which the data is to be transferred, based on the corresponding IP address included in the Internet-frame, and to transfer the data to the receiving apparatus not having the IP address; wherein said controller converts the received data into data which the receiving apparatus not having the IP address can interpret, by utilizing the application program in the memory, when the received data is data which the receiving apparatus not having

Art Unit: 2154

the IP address can not interpret. Lo taught a gateway for bridging data of different communication domains to include a memory that is configured to store an IP address corresponding to the receiving apparatus and an application program which converts received data into data which the receiving apparatus can interpret (col.6, lines 18-21, col.8, lines 32-43); and a controller that is configured to receive an Internet-frame including the IP address corresponding to the receiving apparatus and data from the transmitting apparatus (col.1, lines 45-49, col.4, lines 52-57, col.5, lines 13-14, 19-23, col.6, lines 1-19, 31-37, 43-46, col.8, lines 32-43), to search the memory for the receiving apparatus not having the IP address to which the data is to be transferred, based on the corresponding IP address included in the Internet-frame (col.6, lines 18-21, col.8, lines 32-43); and to transfer the data to the receiving apparatus (col.6, lines 43-46) wherein said controller converts the received data into data which the receiving apparatus can interpret (col.6, lines 1-19, 31-37, 43-46, col.8, lines 32-43), by utilizing the application program in the memory, when the received data is data which the receiving apparatus can not interpret (col.6, lines 1-19, 31-37, 43-46, col.8, lines 32-43). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Akatsu and Lo because Lo's teaching of converting the received data provides Akatsu's gateway to reformat data to support all communication standards (col.1, lines 40-49, col.2, lines 56-57, col.4, lines 52-55). Akatsu and Lo did not specifically teach that the receiving apparatus does not have an IP address. However, since Lo taught to support any communication standard (col.4, lines 52-55), it would have been obvious to one of ordinary skill in the art to use non-IP apparatuses in a communication domain as receiving apparatuses to receive data to that are bridged from another communication domain. It would have been obvious to one of ordinary

Art Unit: 2154

skill in the art at the time the invention was made to use non-IP apparatus as the receiving apparatus in Akatsu and Lo's system since Lo taught to support and bridge any communication standard data (col.4, lines 52-55).

12. As per claim 13, Akatsu and Lo taught the invention substantially as claimed in claim 12. Akatsu and Lo did not specifically teach that the input device is a personal computer. However, it would have been obvious to physically separate the input device from the gateway as a single computing unit. It would have been obvious to one of ordinary skill in the art at the time the invention was made to build the input device as a personal computer separated from the gateway in Akatsu and Lo's system as a design choice.

13. As per claim 14, Akatsu and Lo taught the invention substantially as claimed in claim 12. Akatsu further taught that the controller configures the data into TCP packets for Internet transmission and generates an Internet-frame based on the TCP packet (col.6, lines 63-67, col.9, lines 2-17, 30-31, 33, 54-59, col.10, lines 57-67, col.11, lines 1-5).

14. As per claims 14, 18 and 21, Akatsu and Lo taught the invention substantially as claimed in claim 12. Akatsu further taught that the transmitting apparatus is at least one of a printer, a television, a digital camera (col.6, lines 43-46). Akatsu and Lo did not specifically teach that the transmitting apparatus not provided with an IP address is at least one of a scanner, a refrigerator, a hot-water supply, an electric power meter and a water meter. However, it would have been obvious for the homeowner to include different apparatuses in the home network including but

Art Unit: 2154

not limited to the listed group. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply different apparatus that does not have direct internet access function to Akatsu and Lo's home network according to one's need or desire.

15. As per claims 17 and 20, Akatsu and Lo taught the invention substantially as claimed in claim 12. Akatsu further taught that the data from the receiving apparatus is configured into TCP packets (col.6, lines 63-67, col.9, lines 2-17, 30-31, 33, 54-59, col.10, lines 57-67, col.11, lines 1-5).

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bossemeyer, Jr. et al, US 6,285,671.

Hamlin, US 6,310,888.

Allan, US 6,584,096.

Gelb, US 5,550,984.

Redlich, US 6,591,306.

17. Applicant's arguments with respect to claims 12-24 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2154

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (703)305-0438. The examiner can normally be reached on 8 AM to 5 PM Tuesday to Friday and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703)305-9678. Additionally, the fax numbers for Group 2100 are as follows:

Official Responses: (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-6121.

ksl
November 18, 2003


MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100